

# INTERNATIONAL SEARCH REPORT

Inter

Application No

PCT/JP2004/016890

A. CLASSIFICATION OF SUBJECT MATTER  
C12N1/20 C12N15/75

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal , WPI Data, PAJ, BIOSIS, EMBASE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X	WO 02/097064 A (KAO CORPORATION; SAWADA, KAZUHISA; ENDO, KEIJI; OZAWA, TADAHIRO; TOHAT) 5 December 2002 (2002-12-05) claims 8,9; sequences 2,1	1-9
P,X	& EP 1 391 502 A (KAO CORPORATION) 25 February 2004 (2004-02-25)	1-9
Y	WO 96/34961 A (GENENCOR INTERNATIONAL, INC; UNIVERSIDAD NACIONAL AUTONOMA DE MEXICO) 7 November 1996 (1996-11-07) page 7, paragraph 3; table 1 page 3, paragraph 2; claim 2 ----- -/-	1-9



Further documents are listed in the continuation of box C



Patent family members are listed in annex

### \* Special categories of cited documents

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"I" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

28 April 2005

Date of mailing of the international search report

01/12/2005

Name and mailing address of the ISA

European Patent Office, P B 5818 Patentlaan 2  
NL- 2280 HV RIJSWIJK  
Tel (+31-70) 340-2040, Tx 31 651 epo nl,  
Fax (+31-70) 340-3016

Authorized officer

Marchesini, P

## INTERNATIONAL SEARCH REPORT

Intern Application No  
PCT/JP2004/016890

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>HIROKI YAMAMOTO ET AL: "DETERMINATION OF A 12 KB NUCLEOTIDE SEQUENCE AROUND THE 760 REGION OF THE BACILLUS SUBTILIS CHROMOSOME"</p> <p>MICROBIOLOGY, SOCIETY FOR GENERAL MICROBIOLOGY, READING, GB, vol. 142, 1996, pages 1417-1421, XP002924538</p> <p>ISSN: 1350-0872</p> <p>abstract; table 2</p> <p>-----</p>	1-9
Y	<p>REIZER JONATHAN ET AL: "Novel phosphotransferase system genes revealed by genome analysis - the complete complement of PTS proteins encoded within the genome of Bacillus subtilis"</p> <p>MICROBIOLOGY (READING), vol. 145, no. 12, December 1999 (1999-12), pages 3419-3429, XP002326596</p> <p>ISSN: 1350-0872</p> <p>abstract; table 2</p> <p>-----</p>	1-9
Y	<p>YAMAMOTO HIROKI ET AL: "Regulation of the glv operon in Bacillus subtilis: YfiA (GIVR) is a positive regulator of the operon that is repressed through CcpA and ere"</p> <p>JOURNAL OF BACTERIOLOGY, vol. 183, no. 17, September 2001 (2001-09), pages 5110-5121, XP002326597</p> <p>ISSN: 0021-9193</p> <p>abstract</p> <p>-----</p>	1-9

# INTERNATIONAL SEARCH REPORT

Information on patent family members

Intern I Application No  
PCT/JP2004/016890

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 02097064	A	05-12-2002	CN 1513057 A	14-07-2004
			EP 1391502 A1	25-02-2004
			WO 02097064 A1	05-12-2002
			JP 2003047490 A	18-02-2003
			US 2004248279 A1	09-12-2004
EP 1391502	A	25-02-2004	EP 1391502 A1	25-02-2004
			US 2004248279 A1	09-12-2004
			CN 1513057 A	14-07-2004
			WO 02097064 A1	05-12-2002
			JP 2003047490 A	18-02-2003
WO 9634961	A	07-11-1996	CA 2220100 A1	07-11-1996
			EP 0827542 A1	11-03-1998
			WO 9634961 A1	07-11-1996
			US 2002155521 A1	24-10-2002